

*re-MIN*

**RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 10/501,611A  
Source: Jfwf  
Date Processed by STIC: 5/14/06

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IFWP

**RAW SEQUENCE LISTING** DATE: 07/14/2006  
**PATENT APPLICATION:** US/10/501,611A TIME: 14:48:49

Input Set : N:\Crf4\Refhold\10\_folder\J501611A.raw  
Output Set: N:\CRF4\07142006\J501611A.raw

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1 <110> APPLICANT: Pavan, William J.
2 Loftus, Stacie K.
3 The Government of the United States of America
4 as represented by The Secretary of the
5 Department of Health and Human Services
6 <120> TITLE OF INVENTION: Alteration of RAB38 Function to Modulate Mammalian
7 Pigmentation
8 <130> FILE REFERENCE: 015280-148100US
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/501,611A
10 <141> CURRENT FILING DATE: 2004-07-14
11 <150> PRIOR APPLICATION NUMBER: US 60/349,929
12 <151> PRIOR FILING DATE: 2002-01-18
13 <150> PRIOR APPLICATION NUMBER: WO PCT/US03/01622
14 <151> PRIOR FILING DATE: 2003-01-17
15 <160> NUMBER OF SEQ ID NOS: 28
16 <170> SOFTWARE: PatentIn Ver. 2.1
18 <210> SEQ ID NO: 1
19 <211> LENGTH: 8
20 <212> TYPE: DNA
21 <213> ORGANISM: Mus musculus
22 <220> FEATURE:
23 <223> OTHER INFORMATION: Rab38 sequence of wildtype allele in C57B16/J +/-  

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26 ctgggtgt
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34 c57B16/J Rab38cht/+ DNA
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46 1 5 10 15

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49 Asn Phe
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55 <220> FEATURE:
56 <223> OTHER INFORMATION: rat RAB38 highly conserved N-terminal region
57 <400> SEQUENCE: 4
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      20 25 30
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61 <212> TYPE: PRT
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63 <220> FEATURE:
64 <223> OTHER INFORMATION: mouse RAB38 highly conserved N-terminal region
65 <400> SEQUENCE: 5
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78 <220> FEATURE:
79 <223> OTHER INFORMATION: human RAB5 N-terminal region
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100      Lys Ile Cys Gln Phe Lys Leu Val Leu Leu Gly Glu Ser Ala Val Gly
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110 <223> OTHER INFORMATION: human N-RAS N-terminal region
111 <400> SEQUENCE: 8
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120 <213> ORGANISM: Homo sapiens
121 <220> FEATURE:
122 <223> OTHER INFORMATION: Rab38 cDNA
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126      agctgttgtt gateggcgac ctgggtgtgg gcaagaccag cattatacag cgctatgtgc 180
127      accaaaaactt ctccctcgcac taccgggcca ccattgggtgt ggacttcgcg ctgaagggtgc 240
128      tccactggga cccagagacg gtggtgcgtc tgcaagctctg ggacattgtct ggtcaagaaa 300
129      gatttggaaa catgacaaga gtttattacc gggaaagctat gggggcattt attgttttg 360
130      atgtcaccag accagccaca tttgaagccg tggcaaagtg gaaaatgtat ttggactcaa 420
131      agttaacgct ccctaatttgtt aagccagtgt cagtggttct gttggccaac aaatgtgacc 480
132      aagggaaagga tggcttatg aacaatggac tcaagatggaa ccagttctgc aaggagcatg 540
133      gcttcgttagg atggttttagaa acatcagcca agggaaaacat aaacattgtat gaagcctcaa 600
134      gatgccttgtt caagcacata cttgcaatg agtgtgaccc cctagagtct atagaaccgg 660
135      acatttgtaa gccccatctc acatcgccca aggttgtcag ctgctctggc tggccaaat 720
136      cctagaaggc tcctctgtgc gcatatgaca gacagaaccc gtggccctca tgaatctgc 780
137      ttcaattttt ctttattacc atttgggtt agcgtcagga taggaaagca catgtgacaa 840
138      gccaaagata catgactgtt tggttccgtt caaagaggaa cagccaaatgt tctttatgtg 900
139      ttttccacc ccatcagcac agtgtttaca agcttttaaa atatttgtt gtccaaat 960
140      gctgttttat cattgaacaa agccacttag ggcacacagac agccctaata tttgttcctt 1020
141      taaatcaaca aaggcttctgt gtcttctgtt gaaaggaaat aacagagcaa ggcagaggtc 1080
142      aagctaagtgt tggggatttt tttgcctgt gtgtgtctt gttcaggat caatttgttc 1140
143      ccgggtggtc tgataggctt attaaataga aaccattcat ggtagaccta aggttgkct 1200
144      gtatgtttc tcttcagagt cgtgtgcaca ggcagcctgg gctttgttg tcacttgcgt 1260
145      tgcctgtaat gctggtttaa ctgaaaactgt tatggaaaga tctgtccct gtatgtgcet 1320
146      ttctttcagc ttctctgtac tcaagctgca ggactctct gtatgtggaa gatataattat 1380
147      atatattttt cacaagtgaa aaataaaaaca taaaaatgc tggccctt tttctgata 1439
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150 <211> LENGTH: 291
151 <212> TYPE: DNA

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152 <213> ORGANISM: Homo sapiens
153 <220> FEATURE:
154 <223> OTHER INFORMATION: Rab38 exon 1 and surrounding intron sequence
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157 aggctccgca agaccccgccg gcctccagga tgcagacacc tcacaaggag caccgtaca 120
158 agctgcttgtt gatcggcgac ctgggtgtgg gcaagaccag cattatcaag cgctatgtgc 180
159 accaaaactt ctccctcgac taccgggcca ccattgggtt ggacttcgac ctgaaggtgc 240
160 tccactggga cccagagacg gtggtgcgtc tgcagctctg ggacattgtc 291
162 <210> SEQ ID NO: 11
163 <211> LENGTH: 281
164 <212> TYPE: DNA
165 <213> ORGANISM: Homo sapiens
166 <220> FEATURE:
167 <223> OTHER INFORMATION: Rab38 exon 2
168 <400> SEQUENCE: 11
169 gtcagaaggat atttggaaac atgacaagag tttattaccg ggaagctatg gggcattta 60
170 ttgttttga tgcaccaga ccagccacat ttgaagccgt ggcaaagtgg aaaaatgatt 120
171 tggactcaaa gttaacgctc cctaattgtt aaccgtgtc aatgtttctg ttggccaaca 180
172 aatgtgacca agggaaaggat gtgcttatga acaatggact caagatggac cagttctgca 240
173 aggagcatgg cttcgttagga tggtttggaa catcagccaa g 281
175 <210> SEQ ID NO: 12
176 <211> LENGTH: 868
177 <212> TYPE: DNA
178 <213> ORGANISM: Homo sapiens
179 <220> FEATURE:
180 <223> OTHER INFORMATION: Rab38 exon 3 and surrounding intron sequence
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183 gtgtgacctc ctagagtcta tagaaccgga cattgtgaag ccccatctca catcgcccaa 120
184 ggttgcagc tgctctggct gtgc当地atc ctagaaggct cctctgtgg catatgacag 180
185 acagaacccg tggccctcat gaatcgtgtc tcagtttttc ttattacca ttttggtaa 240
186 gcgtcaggat agggaaaggac atgtgacaag ccaaagatac atgactgtat gtttctgtc 300
187 aaagagaac agcaaatgtt ctttatgtt tttccaccc catcagcaca gtgtttacaa 360
188 gctttaaaaa tattatgttgc tcacaatatg ctgttttac attgagcataa gcaactcagg 420
189 gacacagaca gccc当地at tttttttt aaatcaacaa aggcttctgg tcttcttgag 480
190 aaggggaaata acagagcaag gcagaggta agtaagtgt ggggatttgt ctggccctgg 540
191 ttttttttgc ttccaggatc aatttttcc cgggtggctc gataggctta ttaaatagaa 600
192 accattatgttgc ttagacctaa ggggtggkctg ttttttttgc ttccaggatc gtgtgcacag 660
193 gcagcctggg cttttgtgttgc cacttgcgtt gccc当地atg ctggtttaac tgaaaaactgt 720
194 atggaaagat ctgctccctgt tatgtgcctt ttttttttgc ttccaggatc tcctctgtact caagctgcag 780
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201 <213> ORGANISM: Artificial Sequence
202 <220> FEATURE:
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209 <212> TYPE: DNA
210 <213> ORGANISM: Artificial Sequence
211 <220> FEATURE:
212 <223> OTHER INFORMATION: Description of Artificial Sequence:synthetic TYRP15'T7R DNA
213 <400> SEQUENCE: 14
214 gcgcgtaata cgactcacta tagggccag ttgcaaaatt ccagt          45
216 <210> SEQ ID NO: 15
217 <211> LENGTH: 47
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219 <213> ORGANISM: Artificial Sequence
220 <220> FEATURE:
221 <223> OTHER INFORMATION: Description of Artificial Sequence:synthetic MLSN R T7 DNA
222 <400> SEQUENCE: 15
223 gcggttaata cgactcacta taggggccac aaacatgtcc tacttac          47
225 <210> SEQ ID NO: 16
226 <211> LENGTH: 44
227 <212> TYPE: DNA
228 <213> ORGANISM: Artificial Sequence
229 <220> FEATURE:
230 <223> OTHER INFORMATION: Description of Artificial Sequence:synthetic MLSN FT3 DNA
231 <400> SEQUENCE: 16
232 ggcggaatta accctcacta aagggaagct tccggactct ctac          44
234 <210> SEQ ID NO: 17
235 <211> LENGTH: 21
236 <212> TYPE: DNA
237 <213> ORGANISM: Artificial Sequence
238 <220> FEATURE:
239 <223> OTHER INFORMATION: Description of Artificial Sequence:PCR
240 amplification primer Rab38 Ex1F
241 <400> SEQUENCE: 17
242 taggaaggag gattaaaccc g                                     21
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245 <211> LENGTH: 21
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249 <223> OTHER INFORMATION: Description of Artificial Sequence:PCR
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RAW SEQUENCE LISTING ERROR SUMMARY                    DATE: 07/14/2006  
PATENT APPLICATION: US/10/501,611A                    TIME: 14:48:50

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The rules require that a line not exceed 72 characters in length. This includes spaces.

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Seq#:14; Line(s) 212  
Seq#:15; Line(s) 221  
Seq#:16; Line(s) 230

**VERIFICATION SUMMARY** DATE: 07/14/2006  
**PATENT APPLICATION:** US/10/501,611A TIME: 14:48:50

**Input Set : N:\CrF4\Refhold\10\_folder\J501611A.raw**  
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L:9 M:270 C: Current Application Number differs, Wrong Format